

The embodiments of the invention for which an exclusive privilege and property right is claimed are defined as follows:

1. A process for insuring and risk managing the decommissioning and/or abandoning of an oil and gas production facility owned by an oil and gas producer, the process steps comprising:

collecting engineering and production data related to an oil and gas field and its production facility;

building a model predicting a net production value profile of the oil and gas field using the collected engineering and production data;

estimating future cost of decommissioning and abandoning the oil and gas production facility;

building an insurance premium payment curve to be paid by the oil and gas producer based on the net production value profile and the future cost of decommissioning and abandoning the facility;

selling the oil and gas producer a risk management insurance policy based on an estimated premium payment curve and collecting premium payments from the oil and gas producer; and

paying the oil and gas producer at the time of decommissioning and abandoning the facility for the insured cost of abandonment.

2. The process as described in claim 1 wherein the step of estimating future cost of decommissioning and abandoning the oil and gas facility also includes estimating future cost of environmental risk insurance.

3. The process as described in claim 1 wherein the step of estimating future cost of decommissioning and abandoning the oil and gas facility also includes estimating cost of transfer liability insurance.

4. The process as described in claim 1 further including the step of updating and tracking all data related to the oil and gas field and to the insured production facility during the life of the policy and periodically adjusting the premium payment curve based on discrepancies between the predicted and actual production profile.

5. The process as described in claim 1 wherein at the time of selling the oil and gas producer a risk management insurance policy, the oil and gas producer removes a "P&A" or plug and abandon liability from its balance sheet.

6. The process as described in claim 1 wherein portions of the insurance premium payments received from the oil and gas producer are securitized for further risk reduction.

7. A process for insuring and risk managing the decommissioning and/or abandoning of an oil and gas production facility owned by an oil and gas producer, the process steps comprising:

collecting engineering and production data related to an oil and gas field and its production facility;

building a model predicting a net production value profile of the oil and gas field using the collected engineering and production data;

estimating future cost of decommissioning and abandoning the oil and gas facility, cost of environmental risk insurance and cost of transfer liability insurance;

building an insurance premium payment curve to be paid by the oil and gas producer based on the net production value profile and the future cost of decommissioning and abandoning the facility, the cost of environmental risk insurance and the cost of transfer liability insurance;

selling the oil and gas producer a risk management insurance policy based on an estimated premium payment curve and collecting periodic premium payments from the oil and gas producer; and

paying the oil and gas producer at the time of decommissioning and abandoning the facility for the insured cost of abandonment.

8. The process as described in claim 7 further including the step of updating and tracking all data related to the oil and gas field and to the insured production facility during the life of the policy and periodically adjusting the premium payment curve based on discrepancies between the predicted and actual production profiles.

9. The process as described in claim 7 further including the step of securitizing portions of the insurance premium payments received from the oil and gas producer, for further risk reduction.

10. A process for insuring and risk managing the decommissioning and/or abandoning of an oil and gas production facility owned by an oil and gas producer, the process steps comprising:

collecting engineering and production data related to the oil and gas field and its production facility;

building a model predicting a net production value profile of the oil and gas field using the collected engineering and production data;

estimating future cost of decommissioning and abandoning the oil and gas facility;

building an insurance premium payment curve to be paid by the oil and gas producer based on the net production value profile and the future cost of decommissioning and abandoning the facility;

selling the oil and gas producer a risk management insurance policy based on the estimated premium payment curve, and collecting premium payments from the oil and gas producer;

updating and tracking all data related to the oil and gas field and the insured production facility during the life of the insurance policy and periodically adjusting the premium payment curve based on discrepancies between the predicted and actual production profiles; and

paying the oil and gas producer at the time of decommissioning and abandoning the facility for the insured cost of abandonment.

11. The process as described in claim 10 wherein the step of estimating future cost of decommissioning and abandoning the oil and gas facility also includes estimating future cost of environmental risk insurance.

12. The process as described in claim 10 wherein the step of estimating

future cost of decommissioning and abandoning the oil and gas facility also includes estimating cost of transfer liability insurance.

13. The process as described in claim 10 wherein at the time of selling the risk management insurance policy, the oil and gas producer removes a "P&A" or plug and abandon liability from its balance sheet.

14. The process as described in claim 10 wherein a portion of the insurance premium payments received from the oil and gas producer are securitized for further risk reduction.

15. The process as described in claim 10 further including establishing a trust for receiving the insurance premium payments from the oil and gas producer, for the purpose of selling asset backed securities to an investor.